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ABSTRACT

This report presents an analysis of the data developed from a survey involving case studies of 10 public colleges and universities with good records for graduating African Americans, Hispanics, or American Indians. The survey identified 36 state and 68 institutional practices associated with high, or improved, equity outcomes during the 1980s. Ten states and all of the 142 public, four-year institutions within their boundaries responded to the survey, providing information about the intensity and duration of these practices between 1980 and 1988. States and institutions also provided participation and graduation rates for the racial and ethnic groups they served. Among the study's findings concerning developing conditions between 1980-89 were the following: (1) about 20% of the predominantly Anglo institutions improved both enrollment and graduation equity outcomes between 1980 and 1988; (2) another 20% of the predominantly Anglo institutions improved enrollment equity, but lost ground on graduation equity; (3) about 30% of the institutions lost ground both in enrollment and graduation equity; (4) state efforts to improve access and undergraduate education had positive effects; (5) state policies improving transfer opportunities also had a strong positive effect; and (6) state actions were seen as primarily influencing graduation equity for African Americans and enrollment equity for Hispanics. Contains 5 references. (GLR)

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LEARNING FROM THE EXPERIENCES OF THE PAST DECADE

by Richard C. Richardson Jr.

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PROMOTING FAIR COLLEGE OUTCOMES:

LEARNING FROM THE EXPERIENCES OF THE PAST DECADE

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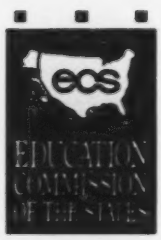

707 Seventeenth Street
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January 1991

This is the final report of a five-year study conducted by the former National Center for Postsecondary Governance and Finance, Research Center at Arizona State University with funding from the Office of Educational Research and Improvement (OERI) of the U.S. Department of Education (ED). The opinions expressed do not necessarily reflect the position of the OERI/ED and no official endorsement should be inferred.

The research informed the deliberations of the Education Commission of the States (ECS) National Task Force on Minority Achievement in Higher Education. This final report of the project provides evidence supporting recommendations found in Achieving Campus Diversity — Policies For Change, the final report of the Task Force. Additional information about the project can be found in that report and in the following four papers prepared for the task force and previously published by ECS:

- *Responding to Student Diversity: A Community College Perspective*, June 1990
- *The State Role in Promoting Equity*, June 1990
- *Institutional Climate and Minority Achievement*, October 1989
- *Serving More Diverse Students: A Contextual View*, June 1989

Copies of this book are available for $5.00 from the ECS Distribution Center, 707 17th Street, Suite 2700, Denver, Colorado 80202-3427, 303-299-3692. Ask for No. MP-90-4.

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Executive Summary

The Study

Case studies of 10 public colleges and universities with good records for graduating African Americans, Hispanics or American Indians were used to develop a survey containing 36 state and 68 institutional practices associated with high or improved equity outcomes during the 1980s. Ten states and all of the 142 public, four-year institutions within their boundaries responded to the survey providing information about the intensity and duration of these practices between 1980 and 1988. States and institutions also provided participation and graduation rates for the racial and ethnic groups they served. This report is based on an analysis of the data from the case studies and the survey.

The Participants

The case study institutions included: Brooklyn College, California State University — Dominguez Hills, Florida International University, Florida State University, Memphis State University, Temple University, University of California — Los Angeles, University of New Mexico — Main, University of Texas at El Paso, and Wayne State University. The 10 states participating in the survey were: California, Florida, Illinois, Massachusetts, New Jersey, New Mexico, Ohio, South Carolina, Tennessee and Texas.

The Results

Widely reported declines in minority participation and graduation rates during the 1980s conceal significant variations across states and among institutions. Equity scores were calculated for the minority participation and graduation rates of the public, four-year institutions of these 10 states for 1980-88 using a scale of 1-100, where 100 represented proportional participation or comparable graduation. Six distinctive equity score patterns resulted:

1. Historically or predominantly minority institutions and slightly more than 10% of the predominantly Anglo institutions achieved essentially fair outcomes (proportional participation and comparable graduation) by 1988. Institutions were far more likely to report fair outcomes for Hispanics than for African Americans.

2. About 20% of the predominantly Anglo institutions improved both enrollment and graduation equity outcomes between 1980 and 1988.

3. Another 20% of the predominantly Anglo institutions improved enrollment equity, but lost ground on graduation equity.

4. About 15% of the predominantly Anglo institutions improved graduation equity while experiencing losses in enrollment equity. This pattern was far more common for African Americans than for Hispanics.

5. About 30% of the institutions lost ground on both enrollment and graduation equity between 1980 and 1988. This pattern was also far more common for African Americans than for Hispanics.

6. Slightly more than 15% of the predominantly Anglo institutions were at less than 60% of proportional enrollment and comparable graduation in 1988. Again, this condition was far more common for African Americans than for Hispanics.

Differences in institutional practices explained much of why some institutions got better results than others. Colleges and universities

recording gains in participation and graduation rates for African Americans and Hispanics between 1980 and 1988 reported higher levels of administrative commitment, greater use of strategic planning, more careful attention to institutional outcomes for minorities and greater emphasis on staff diversity than those that experienced losses. Successful institutions also reported more extensive and more systematic use of strategies to:

1. Reduce barriers to minority participation.

2. Help students achieve high expectations.

3. Make learning environments more responsive to cultural diversity.

Differences in state policy environments played an important role in shaping institutional outcomes. State actions primarily influenced graduation equity for African Americans and enrollment equity among Hispanics.

1. State efforts to improve access and undergraduate education had a positive effect on enrollment equity for both Hispanics and African Americans. These efforts also contributed to improved graduation equity for African Americans.

2. Defining minority participation and graduation as a priority and using planning to set goals and evaluate outcomes occurred most frequently in states where institutions were less involved in open admissions, outreach to the public schools and minority student recruitment; all practices associated with improved enrollment equity or graduation equity for African Americans. The use of priorities and planning had a positive impact on enrollment equity for Hispanics.

3. State policies improving transfer opportunities had a strong positive impact on graduation equity both for Hispanics and for African Americans. Among institutions serving African Americans, an emphasis on transfer also encouraged outreach to the public schools.

4. State quality initiatives, such as a required high school course of study for college admission and rising junior exams, reduced graduation equity for African Americans and enrollment equity for Hispanics. However, these initiatives also motivated campus administrators to engage in strategic planning and to use information about African American participation and achievement, strategies that contributed to improved enrollment and graduation equity.

5. State financial aid policies produced negative consequences for both Hispanics and African Americans. In the case of Hispanics, the policies discouraged institutional strategies that had a positive effect on both enrollment and graduation equity. Institutions serving African Americans were encouraged to follow practices negatively associated with graduation equity.

During the 1980s, most institutions continued to devote more time and resources to recruiting students than to helping those already enrolled graduate. The most commonly reported institutional strategies for improving minority participation and graduation rates required little, if any, faculty involvement. Faculty were extensively involved in helping to improve student achievement only in the more multicultural and historically minority institutions.

There were no "silver bullets" among the practices that contributed to institutional gains in minority participation and graduation rates. Unfair outcomes are the product of practices pursued consistently over long periods of time.

The evidence from this study suggests that achieving fair outcomes will require compensatory practices pursued with similar consistency over considerable time.

The outcomes achieved by some of the public institutions within this 10-state study, as well as the way that administrative commitment and strategic planning offset the negative consequences of state quality initiatives, demonstrated clearly that diversity and quality need not be pursued as mutually exclusive objectives. Given a supportive state climate, institutions can attain both through committed leadership and systematic interventions.

Acknowledgments

The collaborative nature of this study necessitated a high level of dependence upon cooperating researchers in the participating states and institutions. The survey was developed and administered with the extensive support of Stephen Bragg, Illinois; Frank Carrasco, New Mexico; Lewis Dars, Massachusetts; Rosario Martinez and Maricela Oliva, Texas; Ann Moore, Ohio; Charles Ratliff, California; Regina Sofer, Florida; Julia Wells, South Carolina; Mattielynn Williams and Robert Appleson, Tennessee; and Diane Yavorsky, New Jersey. Representatives from most of the public institutions in Florida, Illinois, Massachusetts, South Carolina and Texas attended statewide meetings to assist in the survey design at institutional expense. The quality of their advice and commitment is reflected in the perfect response rate achieved for the survey.

The model that guided development of the survey and the case studies on which it was based owe much to the efforts of Louis Bender, Patricia Crosson, Alfredo G. de los Santos, Howard Simmons, A. Wade Smith, Robert Stout, Gordon Van de Water and the cooperating researchers who worked with them. Alfredo de los Santos, Elaine El-Khawas and Jim Mingle provided encouragement and technical advice. Ted Marchese read the draft report and offered helpful comments. Michael Pavel provided assistance in developing charts and formatting outcomes information. Alice Shepard provided technical assistance with the manuscript and made certain the project stayed within its budget.

Special thanks are owed to our colleagues at the former National Center for Postsecondary Governance and Finance: Dick Chait, Katie Theus, Dick Anderson, Bob Berdahl, Bob Birnbaum and Frank Schmidtlein for their consistent support of the project over its five-year lifespan. Jeffrey Gilmore at OERI became a friend of the project and a valued source of technical advice. Elizabeth Fisk Skinner, who worked with the project during its first four years, was a special source of inspiration and assistance.

Richard C. Richardson Jr.
January 1991

Introduction

The hope that improved access to higher education would lead to fairer outcomes for groups underrepresented because of economic circumstances and previous discrimination has received little encouragement during the past decade. African Americans, several Hispanic groups and American Indians have either lost ground or recorded little progress in participation and graduation rates. By the year 2020, Anglo children will represent one of every two students in the public schools.[1] In 1988 more than eight of every 10 students in higher education were Anglo. Participation rates were lower for African Americans in 1988 than in 1978. For Hispanics, the rates improved slightly over the 10-year period, but remained well below the participation rates for Anglos.[2]

Between now and 2020, historically Anglo colleges and universities must enroll and graduate a more diverse student population or saddle the nation with an under-educated workforce in a society stratified along ethnic and racial lines. For the United States to remain a productive and democratic nation in the 21st century, colleges and universities, in cooperation with state and federal governments, must reverse the equity trends of the past decade.

This report draws upon a collaborative five-year study of the practices and outcomes of public four-year colleges and universities in 13 states to provide state and institutional leaders with information about the practices and policies that distinguished colleges and universities with high or improved equity outcomes during the past decade from those where participation and graduation rates declined or remained low. The experiences of 10 states and their public systems of higher education are used to assess the remaining impediments to fair college outcomes and to suggest promising strategies for the decade ahead.

Learning from Successful Experience

Beginning in 1985, 10 public, historically white colleges and universities with established records for awarding baccalaureate degrees to African Americans, Hispanics or Native Americans cooperated in a three-year effort to explain success in an endeavor where failure had been the rule.[3] Each institution and its state setting was carefully studied to identify the approaches used to improve the participation and graduation rates for underrepresented populations.

The study produced eight testable propositions about the actions required from state governments and colleges and universities to produce fairer outcomes:

1. **Policy decisions of the 1960s encouraged colleges and universities to choose between diversity and quality. Achieving fair outcomes will require all institutions to pursue both.**

Access institutions emphasized enrollment growth over traditional criteria for academic achievement. Selective institutions pursued resource- and reputation-dependent versions of quality without evidencing much concern for the impact on student diversity. African American, Hispanic and American Indian students who were disproportionately poor and the first in their families to attend college were concentrated in the access institutions from which they transferred and graduated at rates well below the Anglo population. To reverse the unsatisfactory equity trends of the 1980s, selective institutions must reform their teaching and learning practices to help a more diverse student population meet high standards across the entire range of academic offerings. And open-access institutions must encourage and help more African American, Hispanic and American Indian students achieve traditional learning outcomes.

2. **Fair outcomes for public systems of higher education should be defined as proportional representation and comparable graduation for all racial and ethnic groups. State and institutional progress toward these goals can be estimated using data collected by the National Center for Educational Statistics.**

An institution's success in enrolling an appropriately diverse student population can be estimated by comparing the racial and ethnic composition of the undergraduate students it enrolls with the composition of the population of the region or state from which those students come. Success in graduating an appropriately diverse student population can be estimated by comparing the racial and ethnic composition of a graduating class with the composition of the undergraduate students from which the graduates came. Race and ethnicity cease to be determinants of higher education opportunities when the composition of the students enrolling in and graduating from higher education institutions within a state reflects its demographics.

3. **Institutions move sequentially through a three-stage process in adapting to student diversity. In the first, barriers to participation are reduced, leading to higher attrition rates for new student populations.**

Institutions improve participation rates through student recruitment, helping students qualify for financial aid, adequate financial aid, serving employed adults and providing open admissions. When barriers are reduced, some of the students who enter have preparations different from the populations an institution has traditionally served. If support services and the learning environment remain unchanged, a more diverse student population will experience high levels of attrition. Graduation rates, in particular, decline precipitously if academic standards are maintained.

4. **In the second stage, institutions develop strategic interventions that improve student retention by helping new student populations cope with teaching and learning environments that assume a level of preparation they do not have. Completion rates remain low in the absence of faculty commitment to translating retention into graduation.**

To reduce attrition rates, institutions help new student populations achieve through outreach to the public schools, helping students make the transition from high school to college, and improving the academic and social climate of the campus for student achievement. Strategies that help new students adjust to prevailing institutional practices improve retention rates. They do not have a similar impact on graduation rates unless an institution is willing to change some of its teaching and learning practices in addition to trying to change nontraditionally prepared African American, Hispanic and American Indian students.

5. **In the third stage, faculty become involved in helping more diversely prepared students achieve academic success in all majors. Improvements in undergraduate education benefit all students, but have their most significant impact on underrepresented populations who tend disproportionately to have the least comprehensive preparations.**

Helping a more diverse student population graduate without reducing academic standards requires improvements in the teaching and learning process. First-generation college students need more help in learning than the experienced sons and daughters of college educated parents. The strategies for improving achievement include academic support, student assessment and developmental assistance and cultural diversity in the educational program.

6. **Institutional leaders guide the adaptation process to ensure systematic attention to comprehensive strategies for reducing barriers, helping students achieve and involving faculty in improvements to the learning environment.**

Achieving both diversity and quality requires a systematic combination of barrier reduction, student help and learning reform. Leaders guide their institutions to improved participation and graduation rates through administrative commitment, strategic planning and coordination, information and communication, staff diversity and faculty incentives and support.

7. **State leaders create policy environments that support or impede institutional efforts to improve equity.**

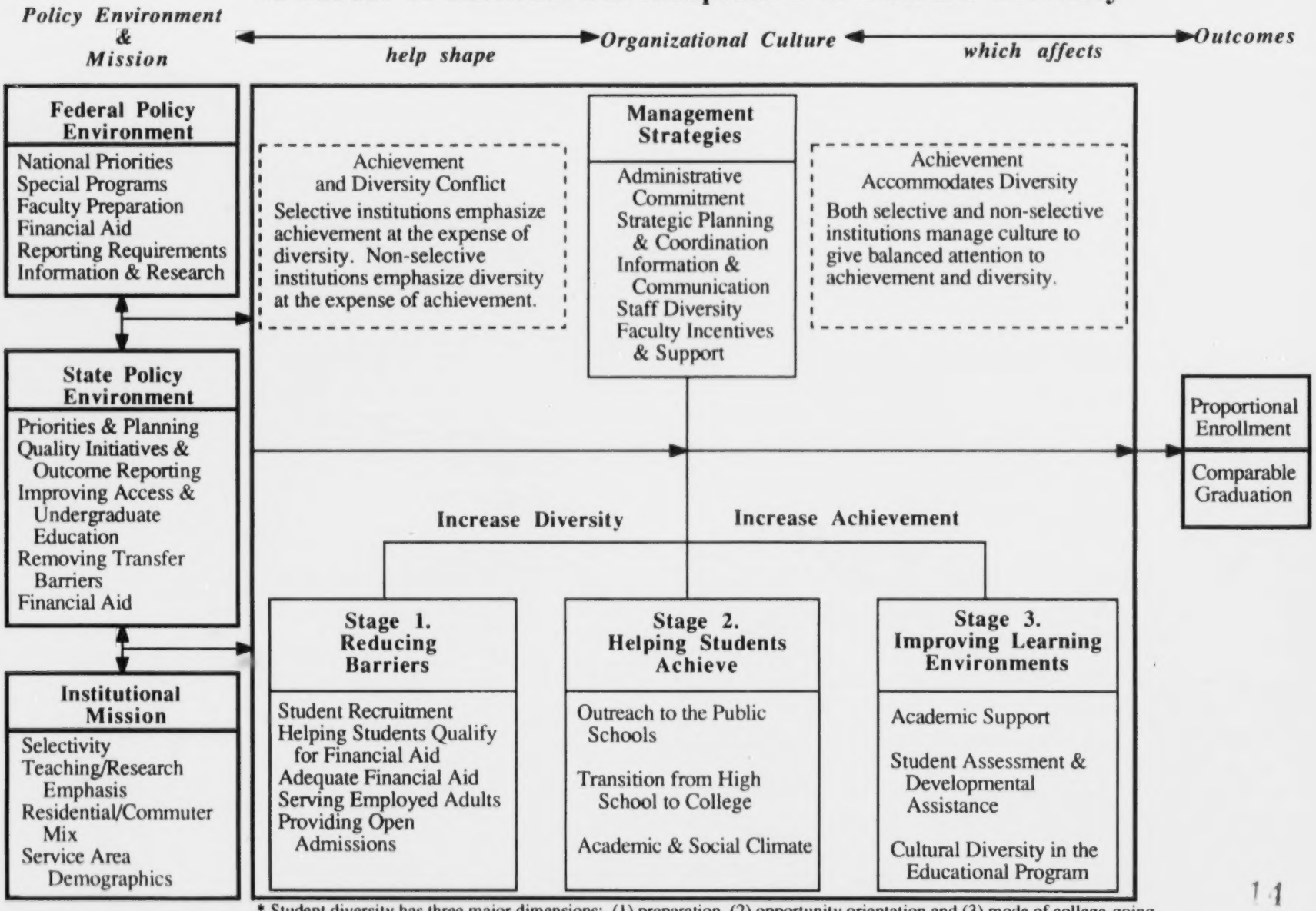
Public institutions face conflicting demands and scarce resources. They make the most progress toward fair outcomes when they receive clear signals from their state policy environments through such actions as assigned priorities and use of the planning process, quality initiatives and outcome reporting, efforts to improve access and undergraduate education, the removal of transfer barriers and financial aid.

8. **The federal government defines national priorities and supports efforts to attain them in ways that enhance and acknowledge the paramount state responsibility for achieving fair outcomes.**

There is a compelling national, as well as state policy interest in achieving fair outcomes. The federal government contributes to a positive policy environment by supporting state efforts to achieve proportional representation and comparable graduation across racial and ethnic groups financially and politically. Historically, the federal government has made its most important contributions through accepting a primary role in removing economic barriers, supporting programs to increase the racial and ethnic diversity of the pools from which faculty are recruited, by providing risk capital for research and development, and by collecting and reporting data that tracks progress across states and for the nation as a whole.

Figure 1 models the influence of state actions and institutional management on the three stages of institutional adaptation to student diversity. Institutions develop cultures that foster the concurrent pursuit of student diversity and student achievement when their leaders design systematic interventions to reduce barriers, help students meet institutional expectations and improve learning environments. A balanced emphasis on quality and diversity enables institutions to progress toward fair outcomes.

A Model of Institutional Adaptation to Student Diversity*



* Student diversity has three major dimensions: (1) preparation, (2) opportunity orientation and (3) mode of college-going. African Americans, Hispanics and American Indians share these dimensions with other groups, but are distributed differently as a function of historic discrimination and socio-economic status. Note: Model modified January 4, 1991.

Testing the Model

Ten states (California, Florida, Illinois, Massachusetts, New Jersey, Ohio, New Mexico, South Carolina, Tennessee and Texas) selected to maximize diversity in size, geographic region and racial/ethnic populations participated in a two-year study to test the propositions summarized by the model. Within these states, surveys were completed by state coordinating and governing boards, system boards and all 142 of the public four-year colleges and universities.

The survey, developed in collaboration with participating states, collected information about the strategies institutions used to improve participation and graduation rates for underrepresented populations during the past decade and the outcomes they obtained.[4] The surveys asked institutions to report on the duration and intensity of 68 different practices previously identified in the 10 case studies as contributing to high or improved participation and graduation rates for African American, Hispanic and American Indian students. Coordinating and governing boards provided information about the intensity and duration of 36 state policies or practices identified with policy environments that encouraged institutions to make the pursuit of fair outcomes (proportional representation and comparable graduation) a high priority.[5]

Enrollment equity scores estimating how closely each institution approached proportional representation for each racial/ethnic group served in 1980 and 1988 were calculated as the ratio of the group's proportional enrollment among undergraduates in a specific year to their proportional representation in the population of the state for the same year (service area demographics were used for institutions enrolling more than 50% of their undergraduates from a single standard metropolitan statistical area [SMA], specific county or other defined in-state service area).

Graduation equity scores estimating how closely each institution approached comparable graduation for each racial/ethnic group were calculated as the ratio between proportional representation among graduates in a given year and proportional representation among undergraduates enrolled four years earlier. Data on the composition of undergraduate enrollments and baccalaureate graduates were obtained from the National Center for Educational Statistics (NCES), Higher Education General Information Survey (HEGIS) and verified by each institution or from the survey which collected information for 1988 in a comparable format.

Least-squares multiple regression was used in two different ways to estimate the relationships between equity scores and the intensity and duration of the 68 institutional practices and 36 state practices identified in the survey. A conservative estimate was obtained by entering 1980 scores as the initial predictor of 1988 outcomes. A less conservative estimate used the difference between 1980 and 1988 outcomes as the dependent variable. The practices with the strongest positive zero-order correlations in each set of equations have been reported as examples of more successful strategies. To limit the effect of small numbers on the outcome measures, analyses for each racial/ethnic group excluded institutions with less than 1% proportional enrollment for that group in 1988.

Exploratory and confirmatory factor analysis were used to reduce the 68 institutional practices to a more manageable 16 clusters. While these clusters differed modestly in composition from the way practices were organized in the original conceptual model, their overall structure was remarkably similar. The 36 state practices were similarly reduced to five clusters through analyzing item intercorrelations (the number of states was insufficient to permit the use of factor analysis). Path analysis was then used to test the value of the conceptual model in explaining differences in equity outcomes among institutions as a function of state actions, management strategies and stage interventions.

After introducing the 10 states that took part in the test of the model and summarizing the outcomes for their public institutions of higher education during the past decade, the report discusses the strategies that differentiated more from less successful institutions, beginning with reduced barriers and following with strategies that helped students meet high academic standards and those used to reform learning environments. Finally, the report identifies the actions through which the more successful states provided a policy environment that encouraged their institutions to focus on improving equity outcomes. Because results suggest important differences as well as similarities, the analysis is reported separately for African Americans and for Hispanics.

The number of states and institutions where American Indians represented a significant part of the student population was too small to support the analysis accomplished for African Americans and Hispanics.

Profile of Participating States

The 10 states collaborating in the test of the propositions were home to 42% of the nation's 1985 population. Together they enrolled 39% of all American Indian college students, 42% of all African Americans, and 72% of all Hispanics. Information on the demographics of the 10 states appears in Table 1. Table 2 reports participation rates for African Americans and Hispanics for 1980, 1984 and 1988 in the form of enrollment equity scores.

TABLE 1

Profile of States Collaborating in the Study

State	State Population x 1,000	Percent African American	Percent Hispanic	Number of Four-year Public Institutions
California	26,365	7.9	22.3	27
Florida	11,366	13.8	9.7	9
Illinois	11,535	15.4	6.5	12
Massachusetts	5,822	4.4	2.7	11
New Jersey	7,562	13.6	7.6	12
New Mexico	1,450	2.0	38.0	6
Ohio	10,744	10.6	1.0	12
South Carolina	3,347	30.3	0.6	12
Tennessee	4,762	16.1	0.4	9
Texas	16,370	11.7	22.5	32
10-State Total	99,323	12.6	11.1	142

Source of Data: U.S. Department of Commerce, Bureau of the Census, 1985 Population Estimates

TABLE 2

Aggregate Enrollment Equity by State
Four-year Public Institutions
1980-88

State	African Americans			Hispanics		
	1980	1984	1988	1980	1984	1988
California	85	76	73	44	42	46
Florida	77	51	100	65	81	98
Illinois	83	83	68	42	51	52
Massachusetts	74	82	63	57	65	57
New Jersey	87	75	78	82	100	100
New Mexico	75	94	99	62	89	70
Ohio	85	71	69	100	100	76
South Carolina	52	51	59	34	100	93
Tennessee	85	73	87	37	68	100
Texas	74	60	74	53	56	60

Value of 100 means that enrollment is proportional to representation in the state's population.

Data for 1980 may not be fully comparable to data for 1988 in some states because of changes in student information systems and reporting practices.

In 1988, African Americans in the eight states where they constituted 5% or more of the 1985 population were enrolled at approximately 76% of their representation. Hispanics in the six states where they were present in similar numbers were enrolled at 71% of their representation. The states exhibited considerable variation. Those with small minority populations (New Mexico for African Americans; South Carolina and Tennessee for Hispanics) recorded some of the highest equity scores. Some of the states where historically black institutions (Florida and Tennessee) enrolled a large proportion of African Americans also had high scores.

Seven of the 10 states reported lower enrollment equity scores for African Americans in 1984 than in 1980. By 1988, five of the seven had reversed the downward trend. Nevertheless, six of the 10 states had lower enrollment equity scores for African Americans in 1988 than in 1980. The trends for Hispanics were more favorable, with nine of the 10 states either maintaining enrollment equity levels or showing improvement between 1980 and 1988.

Table 3 provides comparable information on graduation equity scores. Graduation equity scores were calculated as the ratio between proportional representation among undergraduates in a given year and proportional representation among graduates four years later. In 1988 in the six states with significant Hispanic populations, they were

TABLE 3

Aggregate Graduation Equity by State
Four-year Public Institutions
1980-88

State	African Americans			Hispanics		
	1980	1984	1988	1980	1984	1988
California	65	60	61	87	79	82
Florida	70	63	69	100	100	100
Illinois	62	55	62	95	82	89
Massachusetts	94	44	77	100	79	100
New Jersey	80	69	67	85	86	77
New Mexico	72	68	68	84	82	93
Ohio	53	41	59	100	100	87
South Carolina	94	89	84	100	100	100
Tennessee	84	69	45	100	100	100
Texas	59	59	63	92	82	79

Value of 100 means that graduation classes are proportional to representation among undergraduate students four years earlier.

almost 87% as well represented among baccalaureate graduates as they had been among undergraduates in 1984. For African Americans, the comparable figure was less than 64%. Graduation equity scores estimate progression rates through the higher education system in relation to the rates for all students.

Hispanics graduate at higher rates than African Americans in every one of the study states. No state has a graduation equity score of less than 77 for Hispanics, while the scores ranged down to 45 for African Americans. Four of the states (mostly those with small populations) have achieved comparable graduation rates for Hispanics. None has recorded similar success with African Americans. Comparisons across states should be made with extreme caution. Florida's high graduation equity score for Hispanics has more to do with the characteristics of the Cuban American population who reside there than with state or institutional policies as evidenced by the less impressive results Florida achieved for African Americans. South Carolina's high graduation equity score for African Americans must be considered in relation to its low score for enrollment equity.

Table 4 summarizes the outcomes for public institutions in the 10 states between 1980 and 1988. Approximately a third of the institutions reported increases in the proportions of African Americans and Hispanics enrolled. A slightly larger number reported progress toward comparable graduation rates. A smaller number of colleges and universities reported increases both in proportional enrollments and graduation rates with institutions about twice as likely to report this condition for Hispanics as for African Americans.

TABLE 4

Changes in Enrollment and Graduation Equity Outcomes
Four-year Public Institutions in 10 States
1980-88

Outcomes	African Americans	Hispanics
Improved Enrollment Equity Scores	31%	34%
Improved Graduation Equity Scores	36%	37%
Increased Enrollment and Graduation Equity Scores	13%	25%
	n=133	n=115

Institutions included enrolled 1% or more of the population for which they are counted in 1984 or 1988.

Increases in proportional enrollments and comparable graduation rates tell only part of the story. Some institutions (mostly historically minority or highly multicultural) recorded high enrollment or graduation equity scores or both in 1980 and in 1988. Table 5 reports the distribution of institutions that had enrollment or graduation equity scores of 80 or above in 1988. There is some overlap between institutions that achieved high scores and those that reported improvements.

About a fourth of the institutions had high equity enrollment scores for African Americans in 1988. The number for Hispanics was similar. Almost a third reported high graduation equity scores for African Americans; for Hispanics, the proportion was more than three-fourths. Ten percent reported high enrollment and high graduation scores for African Americans, while 22% recorded these results for Hispanics.

The information summarized in Table 5 suggests that improving equity outcomes for Hispanics involves getting them into college more than improving the achievement rates of those already enrolled. Improving equity outcomes for African Americans involves getting them into college, but the more important challenge involves helping those who are already there to graduate.

Table 6 combines data from the previous two tables to report institutions that either improved enrollment or graduation outcomes between 1980 and 1988 or reported high outcomes in 1988. About half of the institutions reported this combination for African Americans, either for enrollment or for graduation equity. However, only a fourth reported the combination for both graduation and enrollment. Seven of the institutions reporting this combination were historically or predominantly African American, but the remaining 26 were historically and predominantly Anglo.

The results for Hispanics reveal a very different picture with more than three-fourths of the institutions reporting either high or improved enrollment or graduation equity scores, and nearly two-thirds reporting both. These differences support the comments of public policy officials in states like Texas who during the study were more optimistic about achieving fair outcomes for Hispanics than for African Americans.

TABLE 5

Enrollment and Graduation Equity Outcomes
Four-year Public Institutions in 10 States
1988

Outcomes	African Americans	Hispanics
High Enrollment Equity	26%	25%
High Graduation Equity	32%	77%
High Enrollment and Graduation Equity Scores	10%	22%
	n=133	n=115

TABLE 6

High or Improved Enrollment and Graduation Equity Outcomes
Four-year Public Institutions in 10 States
1980-88

Outcomes	African Americans	Hispanics
High or Improved Enrollment Equity Scores	48%	76%
High or Improved Graduation Equity Scores	49%	83%
High or Improved Enrollment Equity and High or Improved Graduation Equity Scores	26%	64%
	n=133	n=115

"High" means that the institution's equity score is 80 or greater.

Institutions included enrolled 1% or more of the population for which they are counted in 1988.

Practices that Predict Fair Outcomes

Not all institutions contributed to the declines in participation and graduation rates so widely reported for African Americans and some Hispanic groups during the 1980s. Some institutions, including a significant number of historically and predominantly Anglo colleges and universities, actually were getting substantially better results in 1988 than they were in 1980. What factors explain the differences?

Institutions that recorded better results made wider and more systematic use of the strategies summarized in Figure 1. The results of the study confirmed the power of state and institutional leaders to alter practices that explained an important part of the differences in participation and graduation rates for African Americans and Hispanics in 1988 as well as the changes in these outcomes between 1980 and 1988. It was insufficient to provide some of the practices for some of the students some of the time. In the more successful institutions, appropriate combinations of strategies from all three stages received sustained attention over time. The influence of any single intervention was invariably modest.

Between 1980 and 1988, more successful institutions used the following strategies to reduce barriers to participation:

1. Adopted alternative admissions programs that included strategies for helping nontraditional admittees overcome differences in preparation.

2. Expanded recruitment efforts to consider such nontraditional sources of underrepresented students as the personnel and training offices of employers. Provided course patterns that facilitated degree achievement by employed adults with family responsibilities.

3. Emphasized merit as well as need in awarding financial assistance to underrepresented student groups.

4. Helped first-generation college students and their families cope with the procedures and forms for requesting financial assistance.

The following strategies were used to help students cope with expectations for which they were not fully prepared:

5. Encouraged academic and professional divisions to adopt comprehensive programs for identifying promising junior high and high school students, strengthening academic preparation before matriculation, helping in the transition to college, and supporting academic achievement.

6. Provided first-generation college students from underrepresented populations with special orientation and other transition experiences, including class scheduling to encourage networking and mutual assistance.

7. Assigned mentors to first-time college students and provided intrusive academic advising.

8. Worked to improve the campus climate for student diversity through publications, organizations, and activities that portrayed cultural differences as a strength.

9. Used residence hall assignments as a recruitment and retention strategy for underrepresented student populations.

The following strategies were used to improve learning environments for a more diverse student population:

10. Assessed the academic competencies of entering students and provided free tutoring and mandatory instruction in basic skills to all who could not perform at levels required for success in regular college credit courses.

11. Taught first-generation college students (and others in need) how to learn through instruction in study skills, note taking and preparation for tests.

12. Helped first-generation college students make the transition from special programs to regular coursework through credit classes offered in alternative formats with smaller numbers and through maintaining tutoring support as long as needed.

13. Encouraged underrepresented student groups to pursue academic excellence, as well as to attain minimum standards, through honors programs and paid internships with faculty members conducting research.

Leaders in the more successful institutions used the following management strategies to ensure that stage interventions were employed in systematic and mutually reenforcing ways:

14. Used strategic planning to establish and financially support proportional enrollment, comparable graduation and staff diversity as top institutional priorities. Supplemented external funds with unrestricted institutional dollars.

15. Employed senior administrators who reflected the diversity of student enrollments.

16. Increased the number of tenure track and tenured African American and Hispanic faculty members.

17. Encouraged all faculty members to accept responsibility for improving the learning environment through incentives and professional development activity.

The following state practices were positively associated with improved institutional equity outcomes:

18. Defined minority participation and achievement as important state priorities through public pronouncements, policy documents and proposed legislation.

19. Provided funding for need-based student financial assistance, educational opportunity programs and basic skills instruction in four-year institutions.

20. Developed a state plan for improving minority student participation and achievement and staff diversity. The plan included a formal evaluation procedure for monitoring outcomes.

21. Developed, monitored and evaluated articulation and collaboration policies that encouraged four-year institutions, community colleges and the K-12 sector to work together to promote student achievement and barrier-free movement among institutions.

22. Kept track of institutional and state progress in achieving equity goals and reported results to the general public.

There were interesting differences between institutions with high outcomes and those with improved outcomes. The group with high outcomes included historically minority colleges and universities, as well as the more multicultural Anglo institutions with sufficient numbers of African Americans and Hispanics to provide comfortable climates for academic achievement. Institutions with high enrollment and graduation outcomes tended to concentrate on stage 1 or stage 3 interventions that

encouraged participation or improved the learning environment for all students. Institutions with improved outcomes emphasized such stage 2 strategies as outreach, transition, mentors and campus climate.

States and institutions were clearly more successful in improving graduation rates during the 1980s than they were in changing participation patterns. Most of the 1988 differences in enrollment equity outcomes were attributable to such barrier-reducing practices as financial aid and alternative admissions criteria, both of which were widely used before 1980. In contrast, differences in graduation equity were more closely associated with such strategies as outreach and academic support adopted during the 1980s to combat high attrition.

What Practices Made a Difference for African Americans?

State and institutional practices accounted for a third of the 1988 differences in institutional enrollment equity scores for African Americans, and about 20% of the differences in graduation equity scores. The institutional practices most strongly associated with high equity scores either for enrollment or graduation are marked in Tables 7-10 with an X followed by (1).

A somewhat different cluster of practices explained about a third of the improvement in enrollment equity scores and a similar proportion of the improvements in graduation equity scores between 1980 and 1988. The institutional practices most strongly related to improvements in equity scores are marked in Tables 7-10 with an X followed by a (2).

Institutions with high outcomes approach proportional representation and comparable graduation. Institutions with improved outcomes are headed in the right direction but may still have been in 1988 far short of proportional enrollment and comparable graduation. The practices in the following tables have been grouped according to the stages of adaptation in the model. Within stages, the practices have been clustered according to the results of the factor analysis of institutional responses to the survey.

Reducing Barriers to Participation

Institutions with high outcomes in 1988 concentrated recruiting activities on high schools with high proportions of African American students and involved current students in recruiting activities. Such institutions also made certain prospective community college transfer students received good information and emphasized their interest in academic performance by awarding a proportional share of their merit scholarships to high-performing African American students. Institutions with high outcomes were also likely to emphasize adult enrollments. Admission to these institutions typically involved some combination of class rank and grade point average for a prescribed distribution of classes.

Institutions that improved participation or graduation rates between 1980 and 1988 waived admission standards, a practice associated with both improved participation and improved graduation rates. Like their high outcomes counterparts, schools with improved outcomes used current students in the recruiting process and recruited through the personnel offices of employers.

Table 7 reports the barrier-reducing strategies that were associated with high or improved outcomes for African Americans.

Helping Students Meet High Expectations

Strategies used by institutions with high outcomes in 1988 involved outreach through professional schools such as business and engineering, and an emphasis on cultural sensitivity and institutional climate.

In marked contrast, the strategies of institutions that improved graduation rates between 1980 and 1988 focused on learning support, priorities in residence hall assignments, mentors and advising and improving campus climate through emphasizing the contributions of African Americans and their culture in institutional publications.

The combination of strategies reported in Table 8 reflects the multiple forms of assistance first-generation college students require to meet high institutional expectations.

TABLE 7

Strategies Used Between 1980 and 1988
by More Successful Institutions to Reduce Barriers
to Participation for African American Students (AAS)

Strategy	Related to Outcomes for EE	GE
Student Recruitment		
■ Concentrated recruitment on schools with high proportions of AAS		X(1)
■ Involved current students in recruiting		X(1,2)
■ Provided CC transfers with accurate and timely advice		X(1)
■ Waived undergraduate admission standards frequently	X(2)	X(2)
Financial Aid Resources		
■ Awarded a proportional share of merit scholarships to AAS	X(1)	
Serving Employed Adults		
■ Recruited through personnel and training offices of employers		X(1,2)
Providing Open Admissions		
■ Required only GPA or class rank for prescribed distribution of courses	X(1,2)	
■ Admission to institution is also admission to major of choice	X(2)	

Legend

EE — Enrollment Equity: (1) High, (2) Improved
GE — Graduation Equity: (1) High, (2) Improved
CC — Community College

TABLE 8

Strategies Used Between 1980 and 1988
by More Successful Institutions to Help
African American Students (AAS) Meet High Expectations

Strategy	Related to Outcomes for EE	GE
Outreach to the Public Schools		
■ Offered instruction, academic advising and summer enrichment through a professional program	X(1)	X(1)
Transition from High School to College		
■ Advised first-time students into specific course sections for networking and mutual assistance		X(2)
■ Emphasized cultural sensitivity in an orientation program		X(1)
■ AAS received priority in residence hall assignments	X(2)	
Academic and Social Climate		
■ Provided intrusive academic advising and mentors for at least the first year		X(2)
■ Emphasized contributions and achievements of AAS in institutional publications		X(1,2)
■ Celebrated cultural diversity through social and educational organizations	X(1)	

Legend

EE — Enrollment Equity: (1) High, (2) Improved
GE — Graduation Equity: (1) High, (2) Improved

Improving Learning Environments

Institutions with high outcomes required that students demonstrate academic skills proficiency by the time they were juniors. They assisted students who lacked such skills through academic advising, tutoring and instruction in basic skills. While requiring academic skills proficiency as a prerequisite to junior status was positively associated with participation rates, the practice had a negative impact on graduation rates.

Institutions with improved outcomes were more likely to require academic skills for entry level college credit courses and less likely to offer basic skills instruction. They did, however, teach study skills, note taking and test preparation routinely to all students, a practice that was associated with improved graduation equity. Interestingly, the practice of requiring academic skills proficiency in entry level courses, while related to improved enrollment equity scores, was not similarly associated with graduation equity.

Colleges and universities with high graduation and enrollment equity scores also emphasized cultural diversity in their educational programs both through offering African American students paid internships with faculty members conducting research and by requiring all students to complete a course on minority cultures. These practices were not characteristic of those with improved outcomes.

The strategies used by both sets of institutions are summarized in Table 9. While the number of interventions reported suggest less attention to the academic environment than to barrier reduction and helping students achieve, the mean scores for learning environment strategies revealed fairly intensive use by all institutions, limiting the number that distinguished the more from the less successful.

Management Strategies that Influence Outcomes

The most striking difference in management strategies between institutions that reported high outcomes in 1988 and those that reported improved outcomes was the point of impact. Without exception, the management strategies of institutions with high outcomes impacted graduation equity. Having African Americans in visible leadership positions was also positively related to enrollment equity. Just as consistently, the management strategies of institutions with improved outcomes impacted on enrollment equity. Only the joint appointment of faculty members by ethnic research centers and academic departments also influenced graduation equity. Significantly, this strategy was most commonly used in research universities, also the most likely to report improved graduation equity scores between 1980 and 1988.

Table 10, which reports the management strategies most commonly associated with high or improved outcomes in 1988, offers a number of insights. Administrative commitment was significantly more common in institutions with high outcomes than in those with improved outcomes. Strategic planning was equally common, but high outcome institutions were more likely to put their money where their planning led them. Institutions with improved outcomes were far more likely to select a single, usually minority administrator, to coordinate all of their recruitment and retention efforts.

Apart from the joint appointment of faculty by ethnic research centers and academic departments, there was little evidence of management strategies that targeted faculty in either set of institutions in 1988. None of the survey strategies associated with faculty incentives and support distinguished successful institutions from their less successful counterparts. Nor was their much evidence of the consistent use of outcome data to monitor progress in achieving fair outcomes.

TABLE 9

Strategies Used Between 1980 and 1988
by More Successful Institutions to Improve
Learning Environments for African American Students (AAS)

Strategy	Related to Outcomes for EE	GE
Academic Support		
■ Taught study skills, note taking and test preparation to all as needed		X(2)
Student Assessment and Developmental Assistance		
■ Required students in entry classes to have needed academic skills	X(2)	
■ Required academic skills proficiency as a prerequisite to junior status	X(1)	
■ Provided academic advising, tutoring and instruction in basic skills	X(1)	
Cultural Diversity in the Educational Program		
■ Offered AAS paid internships with faculty members conducting research		X(1)
■ Required of all students, one course on sensitivity to minority cultures	X(1)	

Legend

EE — Enrollment Equity: (1) High, (2) Improved
GE — Graduation Equity: (1) High, (2) Improved

TABLE 10

Management Strategies Used Between 1980 and 1988 in More Successful Institutions to Improve Outcomes for African American Students (AAS)

Strategy	Related to Outcomes for EE	GE
Administrative Commitment		
■ Recruiting and graduating more AAS was one of three top priorities	X(2)	X(1)
■ African Americans hold visible and influential leadership positions	X(1)	X(1)
Strategic Planning and Coordination		
■ Required goals and action plans for hiring more African American staff	X(2)	X(1)
■ Required goals and action plans for enrolling and graduating more AAS	X(2)	X(1)
■ Used unrestricted dollars to increase enrollment and graduation rates for AAS		X(1)
■ Assigned responsibilities for all AAS initiatives to a single administrator	X(2)	
Staff Diversity		
■ Faculty are jointly appointed by an African American research center and academic departments; faculty vacancies revert to the center	X(2)	X(1,2)

Legend

EE — Enrollment Equity: (1) High, (2) Improved
GE — Graduation Equity: (1) High, (2) Improved

The State Policy Dimension

Path analysis was used to examine the ways that state practices affected African American enrollment and graduation equity either directly or through their influence on campus management strategies and stage interventions. To reduce the 36 state and 68 institutional practices contained in the survey to a manageable number of variables, state practices were grouped into five categories through item intercorrelations and semantic content; institutional practices were grouped into 16 categories using factor analysis. The 16 institutional categories were introduced and defined in Tables 7-10. The five state categories included: improving access and undergraduate education, priorities and planning, improving transfer opportunities, quality initiatives and outcome reporting, and financial aid. These categories are defined in Table 11 by the practices most strongly related to 1988 enrollment or graduation equity.

Table 11 displays the paths (labeled alphabetically) reflecting the sequence through which state policy contributed to differences in equity outcomes between 1980 and 1988. In calculating the impact of state practices, enrollment and graduation outcomes for 1980 were introduced to control for 1988 outcomes explained by conditions existing in 1980.

State practices had very little impact on enrollment equity changes during the 1980s. Almost all of the differences in institutional enrollment patterns in 1988 could be attributed to differences existing in 1980. State efforts to improve access and undergraduate education did cause greater attention to strategic planning and coordination which had a weak positive impact on enrollment equity. Research institutions were more likely to use strategic planning than their more teaching oriented counterparts.

A state emphasis on priorities and planning had negative consequences for enrollment equity by discouraging open admissions in four-year institutions. In some institutions, administrative commitment offset the negative influence of state practice by emphasizing open admissions and student recruitment. Residence halls also contributed to improved enrollment equity.

State practices exerted substantially more influence on graduation outcomes. As was the case for enrollment equity, not all of the influences were positive. State emphasis on improving access and undergraduate education led institutions to emphasize student recruitment and serving employed adults. Student recruitment had a positive impact on graduation equity. Serving employed adults reduced graduation equity suggesting that African Americans were less well prepared to take advantage of such opportunities than other groups.

Policies that strengthened the transfer role of community colleges and made it easier for graduates to transfer without loss of credit had the largest single positive effect on graduation equity of any category of state practice. Improving transfer opportunities also encouraged institutions to develop outreach programs to the public schools, an intervention that improved graduation equity.

State practices related to quality initiatives and outcome reporting produced the greatest number of influences on institutional practice. When institutional administrators failed to take offsetting actions, quality initiatives had substantial negative consequences for graduation equity. However, institutions employed three different sets of management strategies to soften the negative impact. Of the three, strategic planning and coordination produced the strongest improvement in graduation equity. In a second response, campus administrators gave closer attention to information about African American enrollment, transfer, persistence and graduation rates. By itself, such information was negatively related to graduation equity. However, when information was used to develop programs for outreach to the public schools and student recruitment, the effects

TABLE 11

Impact of State Practices on Campus Management, Equity Strategies and Outcomes for African American Students (AAS) Between 1980 and 1988

State Practice	Management Strategies	Stage Interventions	Equity Outcomes
Improving Access and Undergraduate Education			
Supported and monitored equal opportunity program			
Established criteria for special admission of AAS	A. +.221 Strategic Planning & Coordination		+.066 EE
Rewarded success and penalized failure in achieving goals for AAS participation and graduation	B.	+.273 Student Recruitment	+.139 GE
	C.	+.150 Serving Employed Adults	-.164 GE
Mandated diagnostic tests of basic skills for new students			
Priorities and Planning			
Assigned priority to improving equity outcomes for AAS	D.	-.198 Providing Open Admissions	+.059 EE
	Administrative Commitment	+.151 Providing Open Admissions	+.059 EE
Developed plan to improve AAS participation and graduation	E.	-.456 Outreach Public Schools	+.177 GE
Evaluated institutional progress in achieving state goals	F.	-.392 Student Recruitment	+.139 GE
	Administrative Commitment	+.267 Student Recruitment	+.139 GE
Improving Transfer Opportunities			
Developed policies on the status of CC transfers with associate degrees	G.		+.198 GE
Specified desired distribution of baccalaureate students between two and four-year institutions	H.	+.331 Outreach Public Schools	+.177 GE
Quality Initiatives and Outcome Reporting			
Released institution-specific information on equity outcomes	I.		-.322 GE
	J.	+.176 Outreach Public Schools	+.177 GE
Established an approved high school course of study for college admission	K.+.239 Strategic Planning & Coordination		+.247 GE
Developed procedures reporting student performance data to K-12	L.+.202 Information & Communication	1.	-.216 GE
		2.+.141 Outreach Public Schools	+.177 GE
		3.+.117 Student Recruitment	+.139 GE
Required basic skills proficiency for progress to the upper division	M.+.149 Staff Diversity	1.+.245 Outreach Public Schools	+.177 GE
		2.-.224 Serving Employed Adults	-.164 GE
Financial Aid			
Offset the difference between tuition at public institutions and Pell awards for all need-eligible students	N.	+.193 Serving Employed Adults	-.164 GE
Provided special financial assistance programs for AAS			

Legend

EE – Enrollment Equity; GE – Graduation Equity
Numbers preceded by + (Positive Impact) or - (Negative Impact) are standardized regression coefficients (Betas); they indicate the relative strength of significant relationships
CC – Community College; SB – State Governing or Coordinating Board

were positive. Outreach programs, even when used in the absence of administrative strategies, were effective in improving graduation equity. In a third response to quality initiatives and outcome reporting, campus administrators placed greater emphasis on strategies for improving staff diversity. A diverse staff was significantly more likely to engage in outreach to the public schools and significantly less likely to emphasize serving employed adults, both with positive consequences for graduation equity.

Interestingly, the only measurable impact of state student financial aid practices involved an increase in institutional emphasis on serving employed adults, a practice that had negative consequences for graduation equity, as already noted.

Selective institutions and those reporting a strong research emphasis were more likely to have racial and ethnic information on student participation and progress. Selective institutions gave less attention to outreach strategies. Research-oriented institutions placed greater emphasis on student recruiting and strategies for improving staff diversity. Having residence halls also led institutions to place more emphasis on student recruitment.

The relationships among state policies, management strategies, stage interventions and equity outcomes were clearly complex. The relative absence of state practices related to improved enrollment equity for African Americans was clearly related to the absence of improvements to explain. Improving graduation outcomes without sacrificing quality required supporting combinations of state practice and institutional strategies employed over time.

What Practices Made a Difference for Hispanics?

State and institutional practices accounted for 36% of the 1988 differences in graduation outcomes for Hispanics and 39% of the changes in graduation rates between 1980 and 1988. State and institutional practices also explained 32% of the differences in 1988 participation rates and a similar amount of the differences between 1980 and 1988 participation rates.

Outcomes for participation and graduation in 1980 were much less important as predictors of outcomes in 1988 for Hispanics than they were for African Americans, reflecting greater institutional success in improving equity outcomes for Hispanics during the past decade. These figures also demonstrate convincingly the significant influence state and institutional policy leaders have had on participation and graduation outcomes for Hispanics.

The practices most strongly related to positive outcomes are reported according to the three stages of the model and the management strategies that guide their unfolding. In Tables 12-15 as in Tables 7-10, X(1) indicates the intervention or strategy was related to high outcomes in 1988; X(2) indicates the intervention or strategy was related to improved outcomes.

Reducing Barriers to Participation

Institutions achieving high outcomes for Hispanics in 1988 emphasized financial aid, served employed adults and provided open admissions to at least a part of the institution. Helping students qualify for financial aid contributed to graduation outcomes while an emphasis on serving employed adults and open admissions primarily predicted high participation rates.

Institutions that improved equity outcomes between 1980 and 1988 relied most heavily on student recruitment and augmented state and federal need-based financial aid with their own resources. Waiving undergraduate admission standards was associated with improvements in both participation and graduation rates as it was for African Americans. Helping community college students transfer and providing additional need-based financial aid predicted improved graduation rates.

Table 12 summarizes the strategies related to high or improved enrollment and graduation equity for Hispanics.

Helping Students Meet High Expectations

Institutions with high participation or graduation rates in 1988 exhibited relatively few student-helping strategies in contrast to their greater emphasis on reducing barriers and improving learning environments. In marked contrast, institutions with improved participation or graduation rates exhibited a wide range of interventions: collaborating with high schools, providing special access and orientation programs, emphasizing early warnings of academic difficulty, providing intrusive advising and mentors, attending to campus climate and using residence halls for summer bridge programs. Interestingly, all of these interventions were related to improved graduation rates; only special access programs also predicted improved participation rates.

The relatively limited number of interventions exhibited by institutions with high graduation rates — comprehensive outreach and academic support programs offered by professional schools, special orientation sessions, early warning of academic difficulty and priority in residence hall assignments — reflected in part their multicultural character. Institutions with large numbers of Hispanic students were not as dependent on the special interventions needed to help marginally represented populations achieve academic success.

Table 13 summarizes the strategies used by institutions with high or improved participation and graduation rates in 1988.

TABLE 12

Strategies Used Between 1980 and 1988
by More Successful Institutions to Reduce Barriers
to Participation for Hispanic Students (HS)

Strategy	Related to Outcomes for EE	GE
Student Recruitment		
■ Waived undergraduate admission standards frequently	X(2)	X(2)
■ Provided CC transfers with accurate and timely advice		X(2)
Financial Aid Resources		
■ Conducted workshops in high schools for HS and their parents		X(1)
■ Helped prospective students fill out financial aid forms		X(1)
■ Used institutional resources to fund need-based financial aid for HS		X(2)
Serving Employed Adults		
■ Developed a concurrent or cross-registration agreement with an institution enrolling more HS	X(1)	X(1)
■ Scheduled classes so that degrees can be earned through evening attendance	X(1)	
Providing Open Admissions		
■ Provided open admissions to one or more divisions	X(1)	

Legend

EE — Enrollment Equity: (1) High, (2) Improved
GE — Graduation Equity: (1) High, (2) Improved
CC — Community College

TABLE 13

Strategies Used Between 1980 and 1988
by More Successful Institutions to Help
Hispanic Students (HS) Meet High Expectations

Strategy	Related to Outcomes for EE	Related to Outcomes for GE
Outreach to the Public Schools		
■ Professional program offered outreach, instruction, academic advising and summer enrichment		X(1,2)
■ Collaborated with high schools to strengthen college readiness of promising students		X(2)
Transition from High School to College		
■ Provided special access program for low income/first-generation students not eligible for regular admission	X(2)	
■ Provided HS special orientation "piggy backed" on regular orientation		X(1,2)
■ Gave HS priority in residence hall assignments		X(1)
■ Provided a summer bridge program to introduce new HS students to the institution and strategies for success		X(2)
Academic and Social Climate		
■ Provided students in danger of failing with timely advising and assistance		X(1,2)
■ Provided intrusive academic advising and mentors for at least the first year		X(2)
■ Emphasized contributions and achievements of HS in institutional publications		X(2)

Legend

EE — Enrollment Equity: (1) High, (2) Improved
GE — Graduation Equity: (1) High, (2) Improved

Improving Learning Environments

Institutions with high outcomes in 1988 required basic skills proficiency by the junior year and provided extra hours of classroom instruction supplemented by tutoring and learning laboratories. Institutions with improved outcomes required students in entry level courses to have the academic skills necessary for success, but did not necessarily provide more developmental assistance than their less successful colleagues. Both sets of institutions required all students to complete a course on sensitivity to minority cultures. While the strategies used by institutions with high outcomes were associated both with participation and graduation equity, the strategies used in institutions with improved outcomes related only to enrollment equity.

Table 14 identifies those learning strategies that distinguished high performing or improving institutions from their less successful counterparts in 1988. Institutions serving a significant number of Hispanic students made extensive use of learning strategies. Six of the nine learning environment strategies not appearing in Table 14, including basic skills assessment and remediation, tutoring, walk-in learning laboratories, optional courses on minority cultures and instruction in note taking, study skills and test preparation, were used so extensively by all institutions that they were not useful in distinguishing those with high or improved outcomes from the remainder.

TABLE 14

Strategies Used Between 1980 and 1988
by More Successful Institutions to Improve
Learning Environments for Hispanic Students (HS)

Strategy	Related to Outcomes for EE	Related to Outcomes for GE
Student Assessment and Developmental Assistance		
■ Required students in entry classes to have needed academic skills	X(2)	
■ Required academic skills proficiency as a prerequisite to junior status	X(1)	X(1)
■ Offered beginning course sections with extra hours of classroom instruction supplemented by tutoring and learning laboratories		X(1)
Cultural Diversity in the Educational Program		
■ Required of all students one course on sensitivity to minority cultures	X(1,2)	

Legend
EE — Enrollment Equity: (1) High, (2) Improved
GE — Graduation Equity: (1) High, (2) Improved

Management Strategies that Influence Outcomes

Seven management strategies were associated with high graduation rates in 1988. Planning, the use of unrestricted dollars, cultural awareness sessions, special strategies for attracting Hispanic faculty or expanding the recruitment pool, encouraging faculty members to improve teaching and learning, and providing mentors to help new faculty members achieve tenure all played a role. Two strategies — resource allocation tied to planning and the use of mentors to help new Hispanic faculty achieve tenure — were associated with improved graduation rates. There were no management strategies that differentiated institutions with high or improved participation rates from their less successful counterparts.

Management strategies associated with equity outcomes for Hispanic students are reported in Table 15. The absence of management strategies predicting high or improved participation rates suggests that lack of administrative commitment may be part of the problem — especially since the average scores for management strategies were well below those for reducing barriers, helping students achieve and improving the learning environment.

The State Policy Dimension

Hispanics in this study graduated at rates consistently higher than their African American counterparts. But African Americans entered college at rates consistently higher than Hispanics. Many of the differences in institutional strategies and interventions can be traced to these fundamental differences in access and achievement patterns. Achieving fair outcomes for Hispanics calls for state policies that focus first on improving participation rates. For African Americans, the more important focus is graduation equity.

Table 16 reports the results of the path analysis of state practices, campus management strategies, stage interventions and outcomes for 1988 with 1980 outcomes entered as a control. The impact of state practices for Hispanics was almost exclusively on enrollment equity. While outcomes for 1980 remained for Hispanics as for African Americans the largest single influence on differences in enrollment outcomes, they explained far less for Hispanics than for African Americans. States and institutions experienced significantly more success in changing enrollment outcomes for Hispanics than for African Americans during the past decade.

A state emphasis on improving access and undergraduate education through such practices as challenge grants, special admission criteria, coordinating equal opportunity programs, and mandating diagnostic tests of basic skills for first-time students increased institutional attention to cultural diversity in the educational program leading to improved enrollment equity. This emphasis also caused administrators to use strategic planning which contributed to better services for employed adults. Serving employed adults, whether in concert with strategic planning or by itself had weak positive effects on enrollment equity.

Identifying improved educational opportunities for Hispanics as a state priority improved enrollment equity, particularly when done as part of a planning process. The use of priorities, planning and the evaluation of goal achievement also encouraged institutions to give greater attention to serving employed adults with the weak positive effect on enrollment equity previously noted.

Institutions were more likely to devote effort to improving academic and social climate for Hispanics in states that mandated and monitored compliance with articulation policies and used other strategies to improve transfer between two- and four-year colleges. An improved academic and social climate was associated with losses in enrollment equity, probably because institutions that enroll a critical mass of Hispanics have little need for

TABLE 15

Management Strategies Used Between 1980 and 1988 in More Successful Institutions to Improve Outcomes for Hispanic Students (HS)

Strategy	Related to Outcomes for EE	Related to Outcomes for GE
Strategic Planning and Coordination		
■ Required goals and action plans for enrolling and graduating more HS		X(1)
■ Resource allocation is tied to the strategic planning process		X(2)
■ Used unrestricted dollars to increase enrollment and graduation rates for HS		X(1)
■ Held cultural awareness sessions for administrators, faculty and staff		X(1)
Staff Diversity		
■ Recruited new Hispanic faculty through enriched salaries, moving expenses and released time for research		X(1)
■ Used targeted dissertation and post-doctoral fellowships to expand the pool of potential Hispanic faculty		X(1)
Faculty Incentives and Support		
■ Encouraged faculty to develop strategies for improving student achievement with grants and released time		X(1)
■ Provided mentors to untenured Hispanic faculty members to help them achieve tenure		X(1,2)

Legend

EE — Enrollment Equity: (1) High, (2) Improved
GE — Graduation Equity: (1) High, (2) Improved

TABLE 16

Impact of State Practices on Campus Management, Equity Strategies and Outcomes for Hispanic Students (HS) Between 1980 and 1988

State Practice	Management Strategies	Stage Interventions	Equity Outcomes
Improving Access and Undergraduate Education			
Provided challenge grants to improve undergraduate education	A. +.206	Cultural Div. in Educ. Program +.133	EE
Coordinated affirmative action or equal opportunity programs	B. +.147	Serving Employed Adults +.055	EE
Established criteria for special admission of HS	C. +.189 Strategic	Serving Employed Adults +.125	+.055 EE
Mandated diagnostic tests of basic skills for new students			
Priorities and Planning			
Placed high priority on improving opportunities for HS			
Developed and monitored state plan for desegregation of higher education			
Evaluated institutional progress in achieving state goals	D.		+.181 EE
	E. +.223	Serving Employed Adults +.055	EE
Enhanced historically minority institutions			
Developed strategies for preparing and recruiting more Hispanic faculty			
Conducted regular meetings of higher education and K-12 state boards			
Improving Transfer Opportunities			
Mandated and monitored compliance with articulation policies	F. +.187	Academic & Social Climate -.111	EE
Established a common course numbering system	G.		+.231 GE
Quality Initiatives and Outcomes Reporting			
Established an approved high school course of study for college admission	H. +.233 Information & Communication	+.263 Academic & Social Climate	-.111 EE
Required basic skills proficiency for progress to the upper division			
Developed procedures reporting student performance data to K-12			
Financial Aid			
Offset the difference between tuition at public institutions and Pell awards for all need-eligible students	I. -.330	Cultural Div. in Educ. Program +.133	EE
Provided special financial assistance programs for HS	J. -.168	Helping Students Qualify for Aid +.195	GE

Legend

EE – Enrollment Equity; GE – Graduation Equity
+ (Positive Impact); - (Negative Impact)
CC – Community College; SB – State Governing or Coordinating Board
Numbers are standardized regression coefficients (Betas)

special strategies to increase comfort levels. However, state emphasis on improved transfer opportunities had a substantial positive impact on graduation equity for Hispanics as it did for African Americans.

State attention to quality initiatives and outcome reporting had substantially less impact on equity for Hispanics than for African Americans. Where states adopted quality initiatives, campus administrators gave greater attention to Hispanic participation and graduation rates using such information to improve academic and social climate; however, institutions devoting the most effort to improving campus climate were typically those with the most serious equity problems.

States that developed their own need-based programs of financial assistance, including targeted aid for Hispanics, supported institutions that devoted less effort to achieving cultural diversity in their educational programs and to helping students qualify for financial aid. Since cultural diversity in the educational program contributed to enrollment equity, and helping students qualify for financial aid contributed to graduation equity, the negative relationships between state financial aid and these factors suggest that states placing the greatest emphasis on student financial aid made the least progress in improving equity outcomes during the 1980s for both Hispanics and African Americans.

Part of the explanation for the failure of state financial aid policies to exercise a positive influence on either enrollment or graduation equity may involve the extent to which tuition increases during the 1980s outpaced increases in both state and federal aid. But the effects of institutional characteristics as revealed by the path analysis also offered a clue. Selective institutions, particularly those with residence halls, were characterized by administrators with less commitment to student diversity. The absence of administrative commitment along with admission standards designed to include only well prepared students made them less likely to help students qualify for financial assistance, an important strategy for increasing participation rates of first-generation Hispanic college students. Selective institutions with residence halls were more likely to use institutional resources to aid students and more likely to exhibit the campus climate interventions characteristic of institutions where minority enrollments were marginal. While some selective institutions improved equity outcomes significantly during the 1980s, they still did less well than the more multicultural institutions making up the high outcomes category.

Conclusion: The Equity Lessons of the 1980s

Study results made clear the complexities involved in devising a strategy for achieving fair outcomes as distinct from reacting with discrete programs to the problems arising from the absence of such a strategy. In colleges and universities, as in other complex organizations, everything is connected to everything else. Reducing barriers to participation produces student who are doomed to fail unless they are helped to survive in an unfamiliar and often hostile environment. Special programs can help students survive for longer periods of time, but will not improve graduation rates unless faculty become committed to helping students learn as a preferred alternative to accepting failure as an indicator of quality. Institutional leaders must plan and orchestrate the required interventions, and state policy leaders must provide a policy environment that encourages and empowers leaders who are prepared to take on the challenge.

Insights from Testing the Model

The model of institutional adaptation to student diversity explained a significant amount of the differences in participation and graduation rates for African Americans and Hispanics among institutions participating in the study. Without minimizing the importance of such factors as economic status, parental education and previous schooling, the test of the model suggested that state and institutional leaders can produce fairer outcomes by using practices identified within the model as part of a systematic plan. Differences in state and institutional practices explain at least as much of the variation in equity outcomes as differences in student characteristics and preparation. Energy devoted during the past half-century to finding more effective ways of sorting students might in the next decade be more productively focused on improving institutional environments for student learning.

The attendance patterns of African Americans and Hispanics suggest that diversity and quality have been mutually exclusive objectives in many public colleges and universities. Community colleges, historically minority colleges and universities, and urban, multicultural institutions have shouldered most of the responsibility for educating historically underserved populations. Such institutions have the fewest resources and the smallest numbers of baccalaureate options. Public research universities have the most resources, the greatest prestige, the widest range of baccalaureate majors and the least student diversity.

There are some prominent exceptions which support the assertion that institutions are not, as a matter of immutable principle, forced to choose between quality and diversity. The University of California — Berkeley, University of California — Los Angeles, the University of South Carolina and Clemson all have made important gains in diversity during the past decade without discernible losses in quality. However, in California and South Carolina, as elsewhere, other institutions of less prestige have experienced losses in participation rates, graduation rates or both. A pattern of gains and offsetting losses suggests that high prestige universities have recruited students who would otherwise have attended another institution in the same state system. And, less attractive institutions have not changed their strategies sufficiently to compensate for the new circumstance they now face. Sustained progress toward fair outcomes depends upon system as well as institutional improvements.

Mission, location and historical character strongly influenced enrollment patterns as evidenced by the small amount of variance in 1988 outcomes after the effects of 1980 enrollment patterns were entered as a control. The presence of historically minority institutions within a state system reduces the recruitment pool for predominantly Anglo institutions. Comprehensive colleges and universities located near population centers for

African Americans and Hispanics have reached proportional representation, but have been much less successful in achieving comparable graduation. Some research universities have attained high graduation rates through selective admissions without making much progress toward proportional representation.

If states and their systems of higher education are committed to fair outcomes, the history or mission of an institution cannot be an excuse for the failure to contribute appropriately to state goals. In the study, state planning and priorities contributed to improved equity by defining goals for each institution, which if attained, would produce fair outcomes for the system. This approach takes into account the impact of historically minority institutions as well as the influence of mission and location, but does not excuse any institution from contributing a fair share to the system effort.

Barrier-reducing strategies were heavily emphasized by most institutions. Only two — the use of institutional resources to fund student financial aid and scheduling classes so that degrees could be earned exclusively through evening attendance — appeared underutilized. The strong influence of 1980 participation patterns on those in 1988 suggests that much of the potential for equity improvements through these strategies has already been realized. While barrier-reducing strategies may be unlikely to bring about additional improvement, they require continuing attention to prevent the losses experienced by many institutions during the past decade.

Interventions intended to help students meet academic and social expectations were much less in evidence than those designed to reduce barriers. The most heavily used strategies included opportunity programs for limited numbers of students who met special criteria (low income, first-generation college student) and orientation and advising programs that brought students into immediate contact with their majors. Neither of these interventions distinguished between the more and less successful institutions probably because they require little institutional commitment. Priority in residence hall assignments, an effective intervention, was not widely used because many of the institutions that serve the largest numbers of African American and Hispanic students lacked such facilities.

Stage 3 interventions, especially those related to student assessment and developmental assistance, were nearly as common as barrier-reducing strategies. However, the most extensively reported interventions required little faculty involvement. Student assessment was used to sort students so that existing teaching and learning practices did not need to change to accommodate greater student diversity. Developmental assistance was often provided by non-tenure track faculty or by adjacent community colleges. Learning assistance, where not mandated by governing boards as an academic responsibility (as in Tennessee), was commonly provided under the supervision of student affairs staff and limited primarily to students who qualified for externally funded special programs.

Survey responses suggested faculty disengagement from equity objectives in many institutions. The least used strategy for improving learning environments, "departments offering prerequisite courses for majors have developed approaches to avoid screening out disproportionate numbers of minority students," is the one that calls for the most faculty involvement. The second most lightly used intervention, "providing sections of beginning classes that met for extra hours of classroom instruction and enrolled fewer students," also requires greater faculty involvement than the more heavily used assessment and learning assistance interventions. Case study interviews with African American, Hispanic and American Indian graduates of the less multicultural institutions painted a picture of stereotyping for identifiable minorities, differential treatment, and a learning environment filled with many barriers for the less well prepared.[6]

Given the disparity between high average scores for interventions associated with improving learning environments and abundant evidence of limited faculty involvement, the safest conclusion is that the survey did a poor job of identifying and measuring faculty behaviors, the most critical dimension of an effective learning environment. Most public institutions have made extensive use of barrier-reducing strategies, less use of interventions to help students cope, and the least amount of progress in improving undergraduate education, apart from sorting and learning assistance interventions, divorced from the academic mainstream.

One of the most interesting study findings involved the number of management strategies that were positively associated with high or improved participation and graduation rates. Institutions that improved outcomes had managers who set goals, required action plans from subordinate units, allocated resources in accordance with plans, and supported strategies to increase staff diversity and improve professional effectiveness. The number and strength of relationships was surprising, particularly in light of other studies that have found no, or negative, relationships between leadership priorities and institutional outcomes.[7] The best explanation appears to be the longitudinal assessment of both strategies and outcomes. Unfair outcomes have resulted from policies and strategies pursued consistently over long periods of time. Correcting inequities will require similar consistency over an extended time.

The negative impact of state quality initiatives on graduation rates for African Americans makes clear the reciprocal relationship between quality and equity. Neither can be addressed without considering the other. Achieving quality does not require limiting diversity, nor does improved access imply the inevitable loss of quality. But these outcomes can occur when the two are pursued independently. In a similar manner, raising tuition rates to preserve or improve educational quality adversely impacts participation rates in the absence of offsetting increases in need-based financial aid.

While the federal policy environment might appear to be relatively constant across states, the history of Title VI enforcement of the Civil Rights Act of 1964 has produced important differences between states that were subject to Adams regulation and those that have experienced less intrusive approaches to fair outcomes. Court mandates in the Adams states produced goals, plans for attaining them and methods of keeping track of progress that have yet to appear in other states with equally serious equity problems. While court mandates fell short of many of their intended outcomes, they have produced expertise and a readiness for dealing with equity issues much less in evidence in non-Adams counterparts.

Beyond readiness and expertise, court intervention commonly led to the establishment of equal opportunity programs, patterned after the effective federally-funded Trio model. While opportunity programs serve too limited a clientele to have a major impact on baccalaureate completion, they have demonstrated the capacity of nontraditionally prepared students to succeed when provided with appropriate forms of advising, developmental assistance and academic support. They have also been a major vehicle for staff diversification as those recruited to work in them moved into more influential positions of state and institutional leadership.

A Final Note

None of the strategies or policies discussed in this report are unique. All have been used by successful institutions, and many are present in unsuccessful institutions as well. While progress toward equity cannot occur without commitment and systematic effort, it is clear from the experiences of the past decade that institutions with the will to improve participation and graduation rates for underrepresented groups can do so. They are

most likely to have and express that will when state and federal policies provide an environment where fair outcomes can be pursued without sacrificing standards or other valued priorities.

Institutions achieving improved outcomes by 1988 displayed different patterns of interventions from the historically minority and more multicultural institutions with high outcomes. In particular they used different management strategies and gave greater emphasis to interventions aimed at helping students achieve in the context of their academic setting. Multicultural or minority dominant social and academic settings produce comfort levels for African American and Hispanic students that clearly facilitated their persistence and graduation. While predominantly Anglo institutions cannot duplicate a minority dominant environment, they can improve the academic and social environments they provide for African American and Hispanic students by adopting the strategies and interventions of the predominantly Anglo institutions that improved outcomes between 1980 and 1988.

The interventions useful in promoting fair outcomes during the past decade need to be augmented by some of the newer strategies that by 1988 had not been in use long enough to make a significant difference in graduation outcomes. The remaining barriers to fair outcomes for populations who will represent half of the entering labor force sometime in the next century cannot be overcome by special interventions that protect academic practices from change under the dubious premise that this preserves quality. Changes in attitudes and practice must extend to every facet of institutional life. The means to ensure that the next decade is not a replay of the last are well known. Needed is the federal, state and institutional leadership to ensure that the potential for fair outcomes becomes a reality.

Project Publications

The following references report aspects of the five-year study in greater depth.

Books

Richardson, R. C., Jr. and L. W. Bender. Fostering Minority Access and Achievement in Higher Education: The Role of Community Colleges and Universities. San Francisco: Jossey-Bass, Inc. Publishers, 1987.

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Monographs

Richardson, R. C., Jr. Serving More Diverse Students: A Contextual View. Denver, Colorado: Education Commission of the States, 1989.

Richardson, R. C., Jr. Institutional Climate and Minority Achievement. Denver, Colorado: Education Commission of the States, 1989.

Richardson, R. C., Jr. The State Role in Promoting Equity. Denver, Colorado: Education Commission of the States, 1990.

Richardson, R. C., Jr. Responding to Student Diversity: A Community College Perspective. Denver, Colorado: Education Commission of the States, 1990.

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de los Santos, A. G., Jr. and Richardson, R. C. Jr. "Ten Principles for Good Institution Practice in Removing Race/Ethnicity as a Factor in College Completion," Educational Record, Summer/Fall 1988, pp. 34-47.

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Richardson, R. C., Jr. and E. F. Skinner. "Making It In a Majority University: The Minority Graduate's Perspective," Change, vol. 20, no. 3, May/June 1988, pp. 34-42.

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Carter, D. J. and R. Wilson. Eighth Annual Status Report: Minorities in Higher Education. Washington, D. C.: American Council on Education Office of Minority Concerns, 1989.

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Richardson, R. C., Jr. and E. F. Skinner. Achieving Quality and Diversity: Universities in a Multicultural Society. New York: ACE/Macmillan, 1991.

Skinner, E. F. and R. C. Richardson Jr. "Making It In a Majority Institution: The Minority Graduate's Perspective," Change, vol. 20, no. 3, May/June 1988, pp. 34-47.

Notes

1. A. M. Pallas, G. Natriello, and E. L. McDill, "The Changing Nature of the Disadvantaged Population: Current Dimensions and Future Trends," Educational Researcher, vol. 18, no. 5, (June/July 1989), pp. 16-22.

2. D. J. Carter and R. Wilson, Eighth Annual Status Report: Minorities in Higher Education (Washington, D.C.: American Council on Education Office of Minority Concerns, 1989).

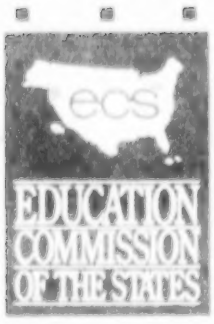
3. The institutions were Brooklyn College, California State University — Dominguez Hills, Florida International University, Florida State University, Memphis State University, Temple University, University of California — Los Angeles, University of New Mexico — Main, University of Texas at El Paso, and Wayne State University. Case studies of these institutions and a description of the model developed to explain their outcomes is available in R. C. Richardson and E. F. Skinner, Achieving Quality and Diversity (New York: American Council on Education/ Macmillan Publishing Company, 1991).

4. The ten states participating in this phase of the study were California, Florida, Illinois, Massachusetts, New Jersey, New Mexico, Ohio, South Carolina, Tennessee and Texas.

5. A complete list of all state and institutional practices appears in chapter 14 of R. C. Richardson, Jr. and E. F. Skinner, Achieving Quality and Diversity (1991).

6. Skinner, E. F. and R. C. Richardson Jr., "Making It In a Majority Institution: The Minority Graduate's Perspective," Change, vol. 20, no. 3 (May/June 1988), pp. 34-47.

7. See, for example, Birnbaum, R., "Administrative Commitments and Minority Enrollments: College Presidents' Goals for Quality and Access," The Review of Higher Education, vol. 11, no. 4, (Summer 1988), pp. 435-458.



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